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CHARACTERISTICS of FAMILY CAMPERS USING THE HURON-MANISTEE NATIONAL FORESTS

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CONTENTS

	Page
INTRODUCTION	1
CONCLUSIONS	1
METHODS	2
FINDINGS	3
The Markets	3
Campground Use	3
Characteristics of Campers	4
MANAGEMENT IMPLICATIONS	10
Campground Development	10
Visitor Information Programs	10
Public Relations	10
A FINAL REMARK	11
LITERATURE CITED	11

Characteristics of Family Campers Using the Huron-Manistee National Forests

by David A. King

INTRODUCTION

During the summer of 1962, a study was made of camping families using the Huron-Manistee National Forests in Lower Michigan. Both the socioeconomic characteristics and campground use of the families were measured. The objectives of the study were: first, to describe the camping families and determine if differences existed with respect to these between the Forests, and second, to identify the variables related to campsite use. Only the first topic is discussed here. The second part of the study — the relation of the variables to campsite use — will be presented elsewhere.

As shown in the last section of this paper, the findings on the characteristics of the campers have important implications for three recreation management problems: campground development, visitor information services, and public relations.

CONCLUSIONS

1. The study, based on a sample of family campers using the Huron-Manistee National Forests in Lower Michigan, showed the campsite market areas to be small and oriented to the south. News releases intended for campers need not be sent beyond an area bounded on the south by a line between Chicago and Cleveland and on the north by the Straits of Mackinac. The orientation of the market indicates that campground development in the southern portions of the Forests would increase accessibility.

2. The Forests provide weekend and short vacation camping. About 80 percent of the families took only one trip to the Forests during the season, and the camping trips averaged 5 days in length. The apparent high turnover in families throughout the season indicates that variety in Visitor Information Service (VIS) programs between days, but not between weeks, is sufficient.

NOTE: The author is an Associate Economist at the Lake States Forest Experiment Station, which is maintained at St. Paul, Minn. by the Forest Service, U.S. Department of Agriculture, in cooperation with the University of Minnesota. The author wishes to acknowledge the helpful advice and counsel of Dr. Richard A. Skok, University of Minnesota.

3. The income, occupation, and education data show that these families are in the middle and upper-middle classes and suggest the need for a high-quality VIS program. Probably the families are also above average in awareness of natural resource management controversy and often have questions about resource policy that deserve good logical answers. Efforts to provide answers are worthwhile because the campers represent the politically more expressive socioeconomic classes in the general population.

4. Family groups and families with children were the predominant users of the campsites. Campground facilities that offer opportunities for a variety of activities are needed. The mixture of children and adults creates a problem in VIS presentations. Daytime presentations for children and their parents and night presentations for adults are suggested.

5. The families were generally experienced campers, but few of them had camped on these Forests. They probably gained their experience in State Parks. Therefore, there may be a need to inform and educate them about management of forest land for objectives other than recreation.

METHODS

The Huron-Manistee National Forests (fig. 1) are close to the major population centers of the Manufacturing Belt. The Manistee is more accessible to the Chicago area than is the Huron, but both are about equally accessible to the Detroit area. Their major recreation attraction is the general forest and water environment, which is fairly uniform over both Forests. The Manistee is traversed by more rivers than the Huron; but the well known Au Sable River runs the length of the Huron.

The two Forests were sampled independently so that comparisons could be made. The study period extended from April 28 through September 14, 1962. This included all of the trout season and all of the school summer vacation period.

All of the campgrounds on both Forests were sampled, each one on 24 days. The sample days were spread throughout the study period to include possible seasonal influences.

Each time a campground was sampled, 25 percent of the occupied campsites were selected at random, and the family or group occupying each of these sites was interviewed. At least one campsite was sampled if the campground was occupied at all. In total, 564 groups were interviewed.

This method of sampling has a built-in bias. The probability that a family is in the sample is a function of the number of days they spent camping on the Forest during the study period. Thus, families who camped a large number of days are overrepresented relative to those who camped for fewer days. A completely satisfactory method of avoiding

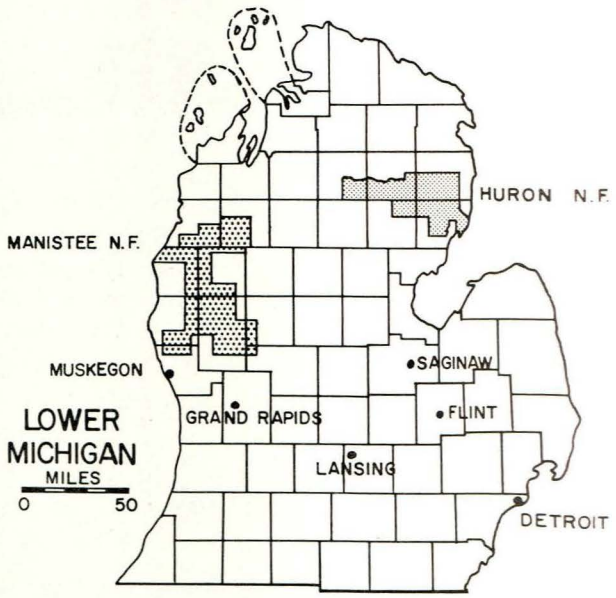

FIGURE 1. — Location of the Huron and Manistee National Forests.

this bias in sample selection has not been developed, but a correction for the bias, as suggested by Lucas (1963), was made in the data analysis.

Another possible source of bias in the data stems from the sampling of both family and nonfamily groups. However, over 87 percent of the groups interviewed were family groups, and only these data are reported here.

Still another possible source of bias results from the method of measuring total days of camping during the study period. The interviewer obtained information on days camped on previous trips to the Forests, but a return postcard was used to obtain the families' camping use of the Forests after the trip on which they were interviewed. The requested information on total days camped for the study period was obtained for 80 percent of the camping families sampled. Tests were made of differences between respondents and nonrespondents with respect to the distributions of the major variables. The only statistically significant difference (at the 5-percent level) was found for the distributions of the number of years the family had camped on the Forests, and this difference existed only for the Huron sample. The analysis was made on the assumption of no difference between respondents and nonrespondents.[1] The final sample size for which complete data were obtained was 395 families, 178 for the Huron and 217 for the Manistee.

Personal interviews, with an interviewer asking questions and recording answers, were used to gather the data. In general, respondent attitude toward the study and the interviewer was very receptive. None refused to be interviewed and only three families refused to answer specific questions — those referring to income and assets.

FINDINGS

The Markets

The Forests' campsite markets do not cover large areas (figs. 2 and 3), but do include 10 percent of the nation's population. The Manistee sample included four families and the Huron sample eight families from outside the North Central Census Region, less than 3 percent of all families in the samples. About 85 percent of the families came from Michigan and about 90 percent lived within a day's drive of the Forests (fig. 4).

Generally, the further a county is from the Forests the lower is the probability that a family living in that county camped on the Forests (King, 1965). It is interesting to note, however, that none of the family campers came from north of the Straits of Mackinac, and only two families lived in a county north of either of the Forests. This probably is a result of much lower population and income levels, combined with greater recreation opportunity, in counties to the north. It may also illustrate the lure of the North for the residents of the North Central Region — vacationing, sightseeing, and fishing are believed to be better "up North."

Campground Use

Approximately 80 percent of the families took only one camping trip to the Forests, and most of them visited the Forests for only a short time (tables 1 and 2). The averages per family were as follows:

	Huron	*Manistee*
Mean days camped per season	6.3	6.2
Median days camped per season	4.1	4.0
Mean days camped per trip	5.0	4.7
Mean trips per season	1.3	1.4

Since the mean length of trip was longer than a weekend but less than a week, one might conclude that the trips taken included other destinations. However, approximately 83 percent of the families gave the Forest as the primary objective of the trip during which they were interviewed.

[1] *More details on the sampling procedure are available in mimeographed form upon request to the Station.*

TABLE 1. — *Number of camping trips taken to Forests, per family (In percent)*

Number of trips	Huron	Manistee	Total
1	82	78	80
2	12	13	12
3	4	6	5
4	1	2	2
5 and more[1]	1	1	1

[1] *Maximum was 10 for the Huron and 14 for the Manistee.*

TABLE 2. — *Total days camped per family during study period (In percent)*

Days[1]	Huron n=178	Manistee n=217	Total
2	17	15	15
3	22	23	23
4	10	12	11
5	7	8	8
6	7	7	7
7	5	8	7
8	5	6	6
9	7	3	5
10	5	3	4
11	1	3	2
12	1	3	2
13	3	2	2
14	3	1	2
15	1	2	2
16	1	1	1
17	2	1	1
18		1	1
19		([2])	
20-67	3	1	2

[1] *The minimum possible days of camping is two, since any part of a calendar day spent in camping was counted as one day.*

[2] *Less than 0.5 percent.*

The data on average length of trip and frequency of trips indicate that camping on the Forests cannot be clearly labeled as either vacation or weekend camping. To determine if a division between weekend trips and longer trips was being hidden by the means and medians, the percentages of families in three classes of average length of trip were calculated:

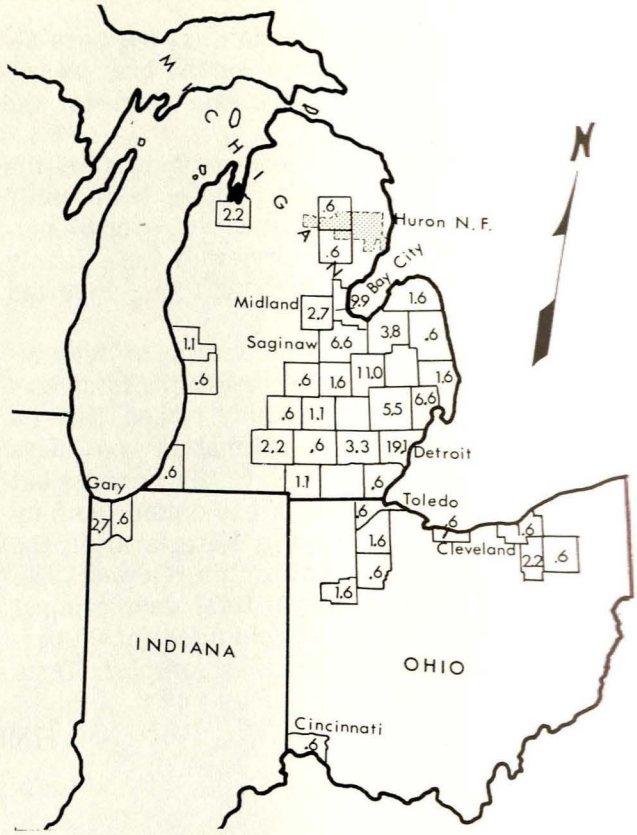

FIGURE 2. — Percent of 1962 Huron National Forest camping families by county of residence.

Trip length (days)	*Huron*	*Manistee*
2-3	45	50
4-9	45	41
10 or more	10	9

If trips longer than 3 days are classified as vacation trips, then camping on the Forests is apparently equally divided between weekend trips and short vacation trips. This division suggests a weekend peakload but a substantial amount of use throughout the week.

Characteristics of Campers

Income. — The family income means and medians indicate that a campground use fee would not be a serious deterrent for these

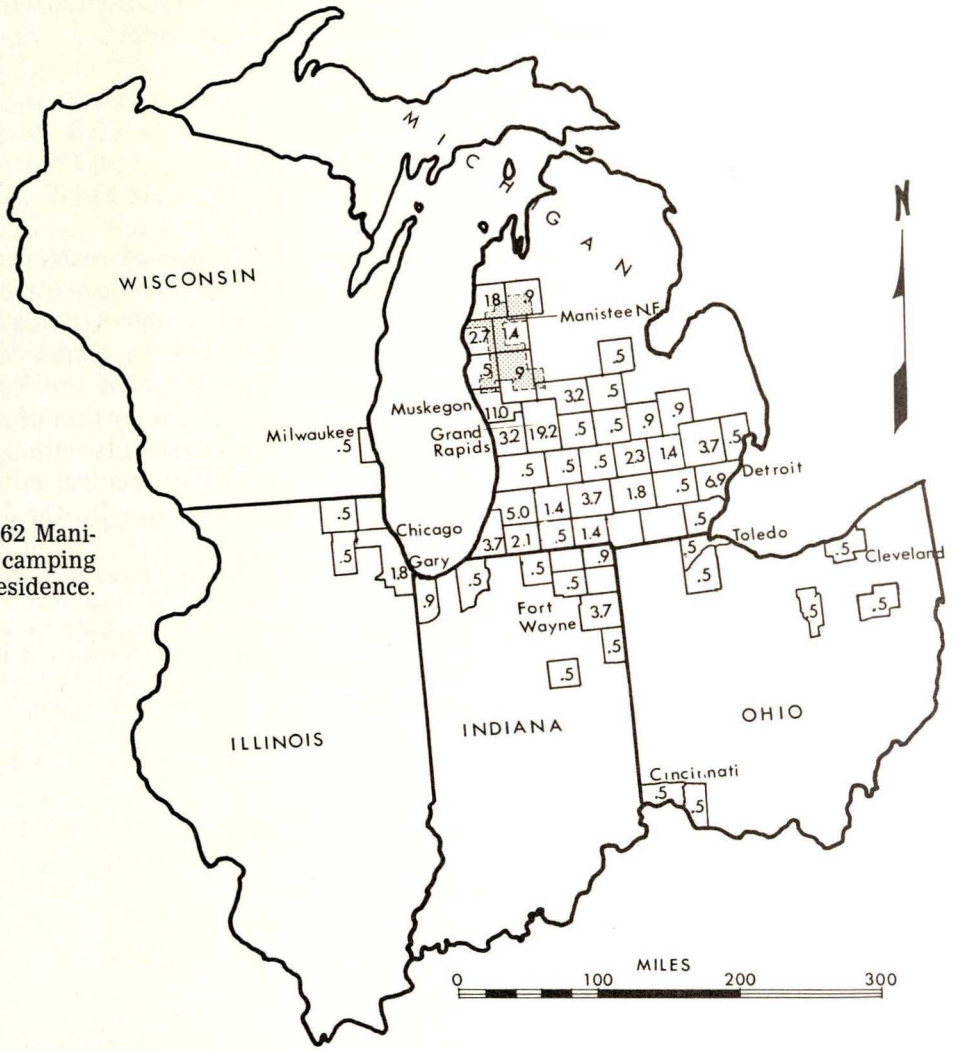

FIGURE 3. — Percent of 1962 Manistee National Forest camping families by county of residence.

families (fig. 5). While there did not seem to be any reason to expect the camper incomes to differ between Forests, they did. The distributions differed significantly at the 1-percent level.[2] The major portion of this difference occurs in the $10,000 and over income classes, in which the Huron had a higher proportion of families than the Manistee. This difference in income distributions between the Forests is primarily the result of differences in the campsite market populations rather than differences in the attractions of the two Forests. A comparison of the income distributions between the two campsite markets showed a significant difference. The higher incomes of the families using the Huron indicate that the potential for camper expenditures in the local economy is higher for the Huron than the Manistee.

Occupation. — The largest proportion of family heads were in the craftsmen and foremen class on both forests (fig. 6).[3] Farmers

[2] *The Kolmogorov-Smirnov test (Siegel, 1956) was used to test differences in the distributions of the quantitative variables. Chi-square was used for tests of the occupation distributions. The 1-percent level of significance was used for all comparisons.*

[3] *The occupation classes used are as defined in the 1960 U.S. Census of Population.*

and farm managers had the lowest representation. The occupation distributions differed significantly between Forests. The main difference is in the manager, official, and proprietor class — more common on the Huron — and the clerical-sales class — more common on the Manistee. These differences agree with those found in the income distributions; the Huron has a higher proportion of family heads in the high-income occupations than the Manistee.

Education. — Two-thirds of the family heads had *at least* a high school education (fig. 7). This is higher than the proportion with that amount of education in the campsite market.

Family structure. — Families averaged about four members and families with children predominate (fig. 8); about 80 percent of the families had children. The relative distribution of children in three age classes is shown below.

Age	*Percent*
1-5	25
6-12	49
13-18	26

Place of residence. — About 80 percent of the families were urban[4] residents. The Census urban definition used is broad and inclusive in terms of population density. A more detailed breakdown might have shown a high proportion of suburban and rural nonfarm residents with a low proportion of rural farm and central city residents. This is partially shown by the low proportion of farm-

[4] *Urban places of residence were identified from the 1960 Census of Population. An urban place is defined in the Census to be "All incorporated and unincorporated places of 2,500 inhabitants or more, and the towns, townships, and counties classified as urban."*

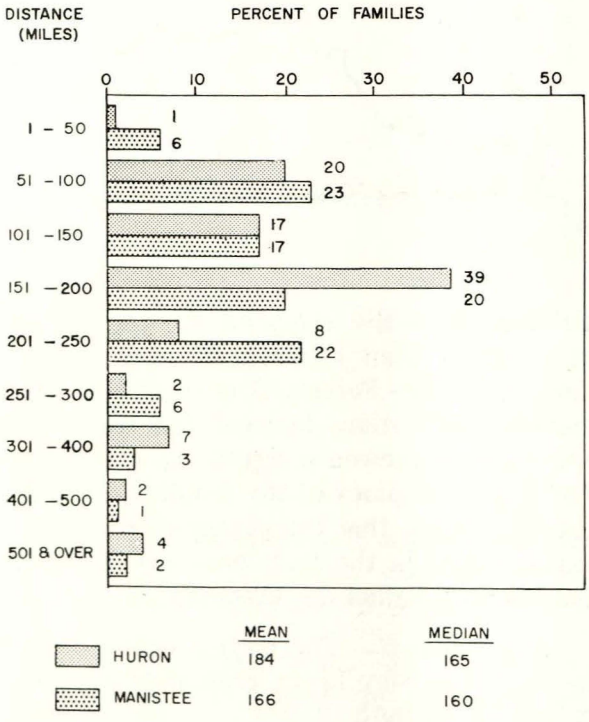

FIGURE 4. — The distances traveled to the Forests by camping families using the Huron and Manistee National Forests, 1962.

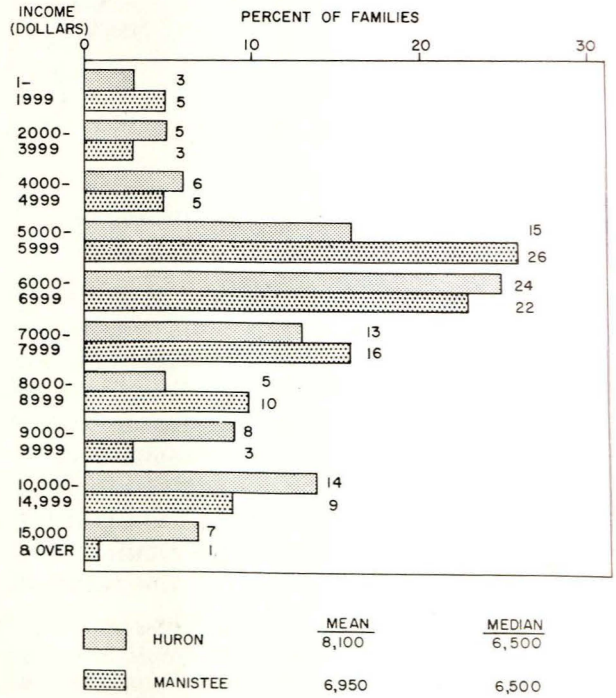

FIGURE 5. — The family incomes of camping families using the Huron and Manistee National Forests in 1962.

ers, 1.5 percent, relative to the proportion of rural residents, 20 percent.

Camping experience. — Two kinds of previous camping experience were measured, years of camping anywhere and years of camping on these Forests. Years may not be the best measure of experience, but are more accurately recalled than total occasions or total days over a lifetime. About half of the families had 10 years or more of camping experience, but about half were in their first year of camping on the Forests (fig. 9). Apparently many campers on the Huron-Manistee are experienced campers who have just recently discovered the Forests. A combination of some increase in campground capacity and publicity may have drawn these people to the Forests. Between 1955 and 1960, 42 family units were added to the Forest campground capacity. Several feature articles about camping on the Forests appeared in the Detroit and Chicago newspapers in 1961. Whether the campers return in future years

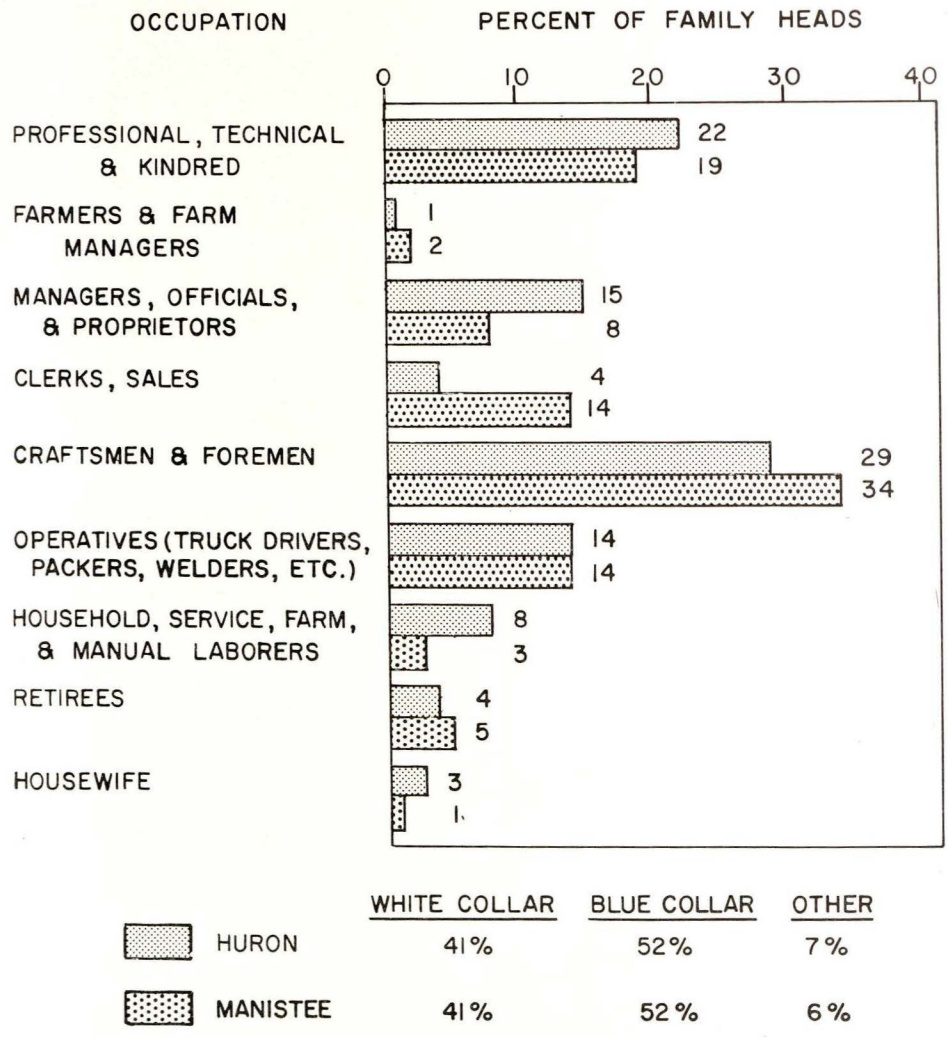

FIGURE 6. — The occupations of heads of camping families using the Huron and Manistee National Forests in 1962.

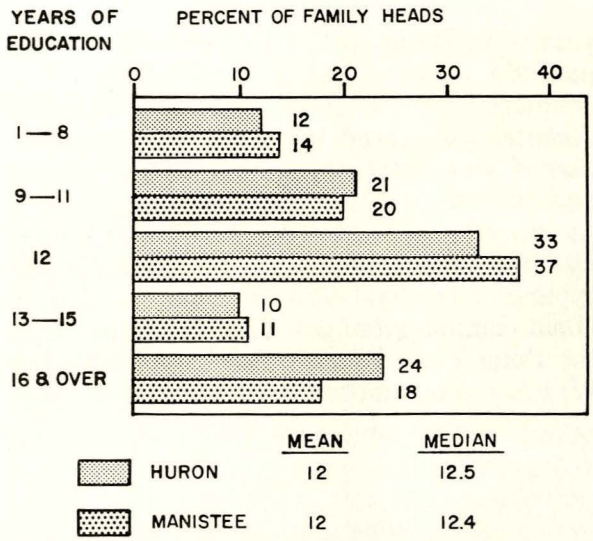

FIGURE 7. — The education of heads of camping families using the Huron and Manistee National Forests in 1962.

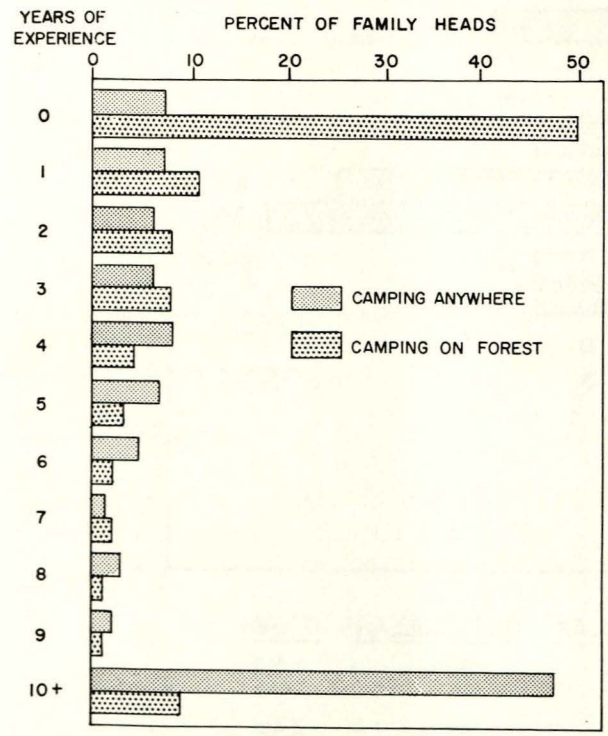

FIGURE 9. — Years of previous camping experience by heads of camping families using the Huron and Manistee National Forests in 1962.

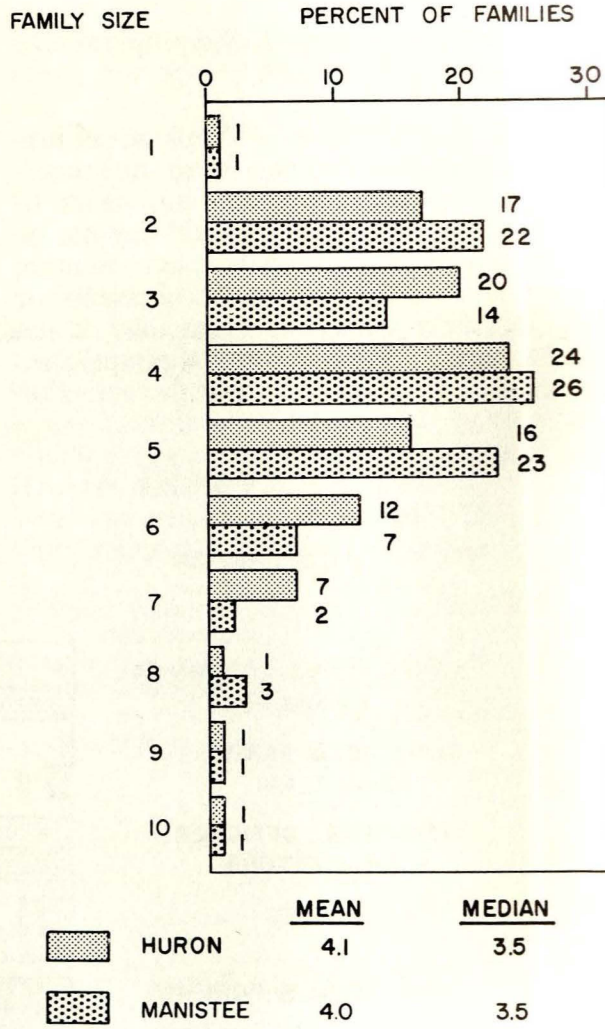

FIGURE 8. — The sizes of camping families using the Huron and Manistee National Forests in 1962. Single persons living alone were counted as one-member families.

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FIGURE 10. — Swimming is one of the favorite activities among family campers, and the most popular campgrounds are those with beaches.

will depend on how well the campgrounds satisfied their desires. If the implied "recruitment" rate remains high and the proportion who continue to camp on the Forests is relatively high, future use could expand rapidly.

Type of shelter. — The tent is the major form of shelter used by these campers. However, as shown in the tabulation below, some type of trailer was used by 41 percent of them and other types of wheeled shelter by an additional 2 or 3 percent of the families.

Type of shelter	*Percent*
Tents	56
House trailer	30
Tent trailer	11
Pick-up camper	1
Station wagon	1
Other[1]	1

[1] *Includes sleeping in the open and in converted buses.*

MANAGEMENT IMPLICATIONS

Campground Development

The small size of the markets and their orientation to the south indicate clearly that campground development in southern portions of the Forests would increase accessibility. However, campgrounds further north may be more attractive because they are farther "up North."

A problem in campground design may intensify if the proportion of campers (30 percent) using house trailers increases in the future. A turn-out campsite spur is more easily used by a trailer camper than a back-in spur, but is also more expensive to construct and less pleasing esthetically.

The high proportion of families with children shows the need for facilities, in or near campgrounds, that will serve the variety of interests found within such families. Some examples are swimming facilities, nature trails, boat rentals, and auto sightseeing tours. Among these, swimming is particularly appealing to families with children (fig. 10). A lake campground with a beach tends to be over-used because of the popularity of swimming. Wherever opportunities exist, investment in the development of beaches at lake campgrounds should be given high priority.

Visitor Information Programs

Variety in information programs from day to day, but not between weeks, would appear to be adequate. This is suggested by the low frequency of trips per family and the average length of trip — 5 days. Evidently there is a high turnover of families, and they tend to stay less than a week.

The predominance of families with children raises a VIS (Visitor Information Service) problem — how to present information to hold the interest of both children and adults, especially when three-fourths of the children are of preschool and elementary school age. The opportunity to inform the adults is not fully met by pitching all programs at a child's level of understanding. A solution might be the use of daytime presentations for children with parents and night presentations for adults.

A number of factors shows the need for a high-quality VIS program. The education and camping experience data indicate that these families have the capacity and interest to understand fairly sophisticated presentations of information. Although they are generally experienced campers, much of this experience has been gained elsewhere than on these Forests — probably in State Parks. Thus, they may have had little exposure to information on wild land management for purposes other than recreation. Casual observation indicated that the campers are interested in the management of public wild lands, but are confused by the many different State and federal agencies involved. A VIS program should include information about, and the reasoning behind, land management policy decisions and explanations of timber, wildlife, and watershed management of forest lands.

Public Relations

The orientation of the campsite market area and its size show that news releases with information for campers and potential campers need not be sent beyond an area bounded on the south by a line between Chicago and Cleveland and on the north by the Straits of Mackinac.

The socioeconomic characteristics of these families indicate that they are probably above average in political awareness and activity (Berelson & Steiner, 1964, p. 423). Recent controversies over wildland management policies have shown the political energy of recreationists. The forestry profession has an opportunity to use some of this energy to improve forest resource management.

A FINAL REMARK

At the present time descriptive studies of recreationists are most useful as benchmarks for comparisons over time. Periodic studies will be needed to detect possible changes in the kinds of people who participate and how they participate in forest recreation. These will provide necessary information to understand relationships between user characteristics and user behavior. As more knowledge is gained about these relationships, the general usefulness of descriptive studies will increase.

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